

Amendments to the Claims:

Please cancel claims 1 to 20 as presented in the underlying International Application No. PCT/EP2004/012581 without prejudice.

Please add the following new claims as indicated in the listing of claims below.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 to 20 (canceled).

Claim 21 (new): A method for manufacturing a lightweight valve with a valve stem, a hollow valve cone and a valve disk closing the valve cone, the valve stem being provided with a hollow space at an end facing the valve disk, the valve disk also having a force transmission element extending through the hollow valve cone into the stem hollow space, the method comprising:

producing a first one-piece component forming the valve disk with the force transmission element by casting, forming and/or a powder metallurgy method;
producing a second component forming the valve stem and the valve cone; and
joining the first and second components together and connecting them by a material, non-positive and/or positive connection.

Claim 22 (new): The method as recited in claim 21 wherein the second component is a one-piece component.

Claim 23 (new): The method as claimed in claim 21 wherein the force transmission element projects in a dome-like manner above a flat side of the valve disk facing the valve cone.

Claim 24 (new): The method as claimed in claim 21 wherein the force transmission element is arranged centrally on the valve disk.

Claim 25 (new): The method as claimed in claim 21 wherein the stem hollow space is provided with an axial stop against which the force transmission element is applied with an end face.

Claim 26 (new): The method as claimed in claim 25 wherein the axial stop is a fully circular shoulder.

Claim 27 (new): The method as claimed in claim 25 wherein the stop has a surface extending at right angles or in a direction at right angles to a longitudinal central axis of the valve stem.

Claim 28 (new): The method as claimed in claim 21 wherein the force transmission element has a constant cross section over an entire length.

Claim 29 (new): The method as claimed in claim 21 wherein a free end of the force transmission element is inclined.

Claim 30 (new): The method as claimed in claim 29 wherein the free end is tapered.

Claim 31 (new): The method as claimed in claim 21 wherein the force transmission element has a bearing surface extending in a direction of a longitudinal central axis of the force transmission element and bears flat against a correspondingly designed countersurface of the stem hollow space.

Claim 32 (new): The method as recited in claim 31 wherein the bearing surface also bears against an inner wall of the hollow valve cone.

Claim 33 (new): The method as recited in claim 31 wherein the bearing surface is fully circular.

Claim 34 (new): The method as claimed in claim 31 wherein the countersurface is provided with at least one recess for forming a positive connection between force transmission element and valve stem.

Claim 35 (new): The method as claimed in claim 34 wherein the recess is fully circular.

Claim 36 (new): The method as claimed in claim 21 wherein the force transmission element has an end face with a blind hole.

Claim 37 (new): The method as claimed in claim 21 wherein the valve cone is formed by a tulip-shaped widening of the end of the valve stem.

Claim 38 (new): The method as claimed in claim 21 wherein a connection between the force transmission element and valve stem is designed so that forces acting on the valve disk during operation are introduced essentially completely via the force transmission element into the valve stem.

Claim 29 (new): The method as claimed in claim 21 wherein the valve disk has a supporting portion against which the valve cone bears flat in sections in an end region of greater diameter.

Claim 30 (new): The method as claimed in claim 21 wherein the valve stem is subsequently hardened in an end region facing away from the valve disk.

Claim 31 (new): The method as claimed in claim 30 wherein the valve stem is inductively hardened.

Claim 32 (new): The method as claimed in claim 21 wherein the valve cone and the valve disk are welded together.

Claim 33 (new): The method as recited in claim 32 wherein the valve cone and the valve

disk are welded together by beam welding or fusion welding.

Claim 34 (new): The method as claimed in claim 21 wherein an outer surface of the lightweight valve is provided with a protective layer by plating.